Complete if Known Substitute for form 1449A/PTO **Application Number INFORMATION DISCLOSURE** Even Date Herewith Filing Date STATEMENT BY APPLICANT First Named Inventor Beka SOLOMON 1632 Group Art Unit (use as many sheets as necessary) **Examiner Name** Attorney Docket Number SOLOMON=2A.1 Sheet of 5

				U.S. PATENT DOCU	IMENTS	
		U.S. Patent	Document	Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines,
Examiner Initials*	Cite No.1	Number	Kind Code ² (if known)	of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear
	AA	5,688,651		Solomon	11-18-1997	
	AB	5,811-093		Merril et al	09-22-1998	

				FOREIG	N PATENT DOCUMENTS			
Evernines	Cito		Foreign Patent Nu	mber Kind Code ⁵		Date of Publication of	Pages, Columns, Lines,	
Examiner Initials*		Office ³	Number	(if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD- YYYY	Where Relevant Passages or Relevant Figures Appear	T ⁶
	AC	EP	0 526 511	B1	Molecular Rx Inc.	03-26-1991	_	
	AD	wo	92/07077	A1	Perham et al	04-30-1992		
	AE	WQ	99/27944	A1	Athena Neurosciences, Inc.	06-10-1999		
		ļ						
	ļ	ļ						

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	AF	BARBAS et al, "Assembly of combinatorial antibody libraries on phage surfaces: The gene III site", Proc Natl Acad Sci USA 88:7978-7982 (1991)	
		BARBAS et al, "Semisynthetic combinatorial antibody libraries: a chemical solution to the diversity problem", <u>Proc</u> Natl Acad Sci USA 89:4457-4461 (1992)	
		BARBAS et al, "Recombinant human Fab fragments neutralize human type 1 immunodeficiency virus <i>in vitro</i> ", Proc Natl Acad Sci USA 89:9339-9343 (1992)	

Examiner	Date		
Signature	 Considered		

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PT()		C	omplete if Known	
INICODIATION			Application Number		
INFORMATION			Filing Date	Even Date Herewith	
STATEMENT I	BY AP	PLICANT	First Named Inventor	Beka SOLOMON	
			Group Art Unit	1632	
(use as many s	sheets as n	ecessary)	Examiner Name		
Sheet 2	of	5	Attorney Docket Number	SOLOMON=2A.1	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner nitials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Т
İ	Al	BARBAS et al, "Human monoclonal Fab fragments derived from a combinatorial library bind to respiratory syncytial virus F glycoprotein and neutralize infectivity", <u>Proc Natl Acad Sci USA</u> 89:10164-10168 (1992)	
	AJ	BARINAGA M, "An Immunization Against Alzheimer's?", Science 285:175-176 (1999)	
	AK	BREITLING et al, "A surface expression vector for antibody screening", Gene 104:147-153 (1991)	
	AL	BURTION et al, "A large array of human monoclonal antibodies to type 1 human immunodeficiency virus from combinatorial libraries of asymptomatic seropositive individuals", Proc Natl Acad Sci USA 88:10134-10137 (1991)	
	AM	CESARENI et al, "Minireview Peptides display on filamentous phage capsids a new powerful tool to study protein ligand interaction", FEBS Letters 307:66-70 (1992)	
	AN	CHANG et al, "Expression of antibody Fab domains on bacteriophage surfaces potential use for antibody selection", <u>J Immunol</u> 147:3610-3614 (1991)	
	AO	CHECK E, "Nerve inflammation halts trial for Alzheimer's Drug", Nature 415:462 (2002)	
	AP	CLACKSON et al, "Letters to nature making antibody fragments using phage display libraries", Nature 352:624-628 (1991)	•
	AQ	COSME J, "Immunization reverses memory deficits without reducing brain AB burden in Alzheimer's disease model" (2002)	
	AR	DELMASTRO, et al, "Immunogenicity of filamentous phage displaying peptide mimotopes after oral administration", Vaccine 15:1276-1285 (1997)	
	AS	DRAGHIA et al, "Gene delivery into the central nervous system by nasal instillation in rats", Gene Ther 2(6):418-123 (1995)	_
	AT I	ECK et al, "Gene-Based Therapy", in Goodman & Gilman's The Pharmacological Basis of Therapeutics, 9 th Ed., AcGraw-Hill (1996), pp. 77-101	
1	AU F	RENKEL et al, "N-terminal EFRH sequence of Alzheimer's β-amyloid peptide represents the epitope of its anti- ggregating antibodies", <u>J Neuroimmunol</u> 88:85-90 (1998)	

Examiner	Date	
Signature		
Olgitature	Considered	

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Substitute f	or form 1449A/PTO			C	omplet if Known	
Oubstitute i				Application Number		
INFORMATION DISCLOSURE				Filing Date	Even Date Herewith	
STATEMENT BY APPLICANT			PLICANT	First Named Inventor	Beka SOLOMON	
OIAI		•	LIOMITI	Group Art Unit	1632	
	(use as many sheets	as n	ecessary)	Examiner Name		
Sheet	3	of	5	Attorney Docket Number	SOLOMON=2A.1	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
	AV	GARRARD et al, "Fab assembly and enrichment in a monovalent phage display system", <u>Biotechnology</u> , 9:1373-1377 (1991)	
	AW	GLASER et al, "Antibody engineering by codon-based mutagenesis in a filamentous phage vector system", <u>J</u> Immunol 149:3903-3913 (1992)	
		GOESSLING et al, "Enhanced degradation of the ferritin repressor protein during induction of ferritin messenger RNA translation", Science 256:670 (1992)	
	AY	GRAM et al, "In vitro selection and affinity maturation of antibodies from a naïve combinatorial immunoglobulin library", Proc Natl Acad Sci USA 89:3576-3580 (1992)	
	AZ	HANAN et al, "Inhibitory effect of monoclonal antibodies on Alzheimer's β-amyloid peptide aggregation", Int J Exp Clin Invest 3:130-133 (1996)	
	ВА	HARDY et al, "The amyloid hypothesis of Alzheimer's disease: progress and problems on the road to therapeutics", Science 297(5580):353-356 (2002)	
	BB	HAWKINS et al, "Selection of phage antibodies by binding affinity mimicking affinity maturation", <u>J Mol Biol</u> 226:889-896 (1992)	
	ВС	HOOGENBOOM et al, "Multi-subunit proteins on the surface of filamentous phage: methodologies for displaying antibody (Fab) heavy and light chains", Nucleic Acids Res 19:4133-4137 (1991)	
	BD	HOOGENBOOM et al, "Building antibodies from their genes", <u>Immunol Rev</u> 130-41-68 (1992)	
	BE	HUSE et al, "Application of a filamentous phage pVIII fusion protein system suitable for efficient production screening, and mutagenesis of F(ab) antibody fragments", <u>J Immunol</u> (1992)	
	BF	JANUS et al, "A\$ peptide immunization reduces behavioral impairment and plaques in a model of Alzheimer's disease", Nature 408(6815):979-982 (2000)	
	BG	JONES et al, "Display of antibody chains on filamentous bacteriophage", Methods Mol Biol 80:449-459	

Examiner	Date
Signature	Considered

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Subatituta f	or form 1449A/PTO			Complete if Known			
Substitute	01101111144974110			Application Number			
INFO	RMATION [ISC	LOSURE	Filing Date	Even Date Herewith		
STATEMENT BY APPLICANT				First Named Inventor	Beka SOLOMON		
SIAI	CIAICIA! DI	~ !	LIOAII	Group Art Unit	1632		
	(use as many shee	ts as n	ecessary)	Examiner Name			
Sheet	4	of	5	Attorney Docket Number	SOLOMON=2A.1		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
xaminer nitials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	ВН	KANG et al, "Linkage of recognition and replication functions by assembling combinatorial antibody Fab libraries along phage surfaces", Proc Natl Acad Sci USA 88:4363-4366 (1991)	
	ВІ	KANG et al, "Antibody redesign by chain shuffling from random combinatorial immunoglobulin libraries", <u>Proc Natl Acad Sci USA</u> 88:11120-11123 (1991)	
	BJ	LERNER et al, "Antibodies without immunization", Science 258:1313-1314 (1992)	
	ВК	MALIK, et al, "Factors limiting display of foreign peptides on the major coat protein of filamentous bacteriophage capsids and a potential role for leader peptidase", <u>FEBS Letters</u> , 436:263-266 (1998)	
	BL	MALIK, et al, "Role of capsid structure and membrane protein processing in determining the size and copy number of peptides displayed on the major coat protein of filamentous bacteriophage", <u>J Mol Biol</u> ,260:9-21 (1996)	
	ВМ	MARKS et al, "By-passing immunization human antibodies from V-gene libraries displayed on phage", <u>J Mol Biol</u> 222:581-597 (1991)	
<u> </u>	BN	MARKS et al, "Molecular evolution of proteins on filamentous phage", <u>J Biol Chem</u> 267:16007-16010 (1992)	
	ВО	McCAFFERTY et al, "Letters to nature phage antibodies: filamentous phage displaying antibody variable domains", Nature 348:552-554 (1990)	
	BP	MEOLA et al, "Immunogenicity of filamentous phage displaying peptidemimotopes after oral administration", Vaccine 15:1276-1285 (1997)	
	BQ	MORGAN et al, "A\$ peptide vaccination prevents memory loss in an animal model of Alzheimer's disease", Nature 408(6815):982-985 (2000)	
	BR	MOTTI et al, "Recognition by human sera and immunogenicity of HbsAg mimotopes selected from an M13 phage display library", <u>Gene</u> 146:191-198 (1994)	
	BS	NICHOLLS P, "Work on weapons adds to public distrust of science", Nature 416:677 (2002)	T

Examiner	Date	
Signature	Considered	

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO		Complete if Known			
			Application Number		
INFORMATIO	N DISC	LOSURE	Filing Date	Even Date Herewith	
STATEMENT	BY AP	PLICANT	First Named Inventor	Beka SOLOMON	
			Group Art Unit	1632	
(use as many	<i>sheets as</i> n	ecessary)	Examiner Name		
Sheet 5	of	5	Attorney Docket Number	SOLOMON=2A.1	

	,	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	BT	RENAULD-MONGENIE et al, "Induction of mucosal immune responses against a heterologous antigen fused to filamentous hemagglutinin after intranasal immunization with recombinant <i>Bordetella pertussis</i> ", <u>Proc Natl Acad Sci USA</u> 93:7944-7949 (1996)	
	BU	SCHENK et al, "Immunization with amyloid-β attenuates Alzheimer-disease-like pathology in the PDDAPP mouse", Nature 400:173-177 (1999)	
	BV	SCOTT et al, "Searching for Peptide Ligands with an Epitope Library," <u>Science</u> 249:386-390	
	BW	SMITH, "Surface presentation of protein epitopes using bacteriophage expression systems", <u>Cur Opin Biotechnol</u> 2:668-673 (1991)	
	ВХ	SOLOMON et al, "Monoclonal antibodies inhibit <i>in vitro</i> fibrillar aggregation of the Alzheimer β-amyloid peptide", ", <u>Proc Natl Acad Sci USA</u> 93:452-455 (1996)	
	BY	SOLOMON et al, "Disaggregation of Alzheimer β-amyloid by site-directed mAb", Proc Natl Acad Sci USA 94:4109-4112 (1997)	
	BZ	SOMERVILLE et al, "Immunodetection of PrP ^{SC} in spleens of some scrapie-infected sheep but not BSE-infected cows", <u>J Gen Virol</u> 7:2389-2396 (1997)	
	CA	VERMA et al, "Gene therapy promises, problems and prospects", Nature 389:239-42 (1997)	
	СВ	WETZEL, "Commentary learning from the immune system laboratory methods for creating and refining molecular diversity in polypeptides", Protein Eng 4:371-374 (1991)	
	СС	WILLIS A, "Immunological properties of foreign peptides in multiple display on a filamentous bacteriophage", Gene 128(1):79-83 91993)	**
	CD	ZEBEDEE et al, "Human combinatorial antibody libraries to hepatitis B surface antigen", Proc Natl Acad Sci USA 89:3175-3179 (1992)	
	CE	"Test of Alzheimer's Vaccine in Mice Shows Promise", CNN Interactive (July 7, 1999)	

Examiner	Date	
Signature	Considered	

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.